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9. (Amended) Isolated DNA encoding the extracellular portion of the HER2 molecule essentially free of transmembrane and intracellular portions of the HER2 molecule and essentially free of DNA encoding a tyrosine kinase domain, said isolated DNA [as defined by claim 1,] terminating upstream of the portion encoding the transmembrane domain of said HER2 molecule.

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- 12. (Amended) The isolated DNA as defined by claim 9, wherein said DNA encodes an immune epitope [a sequence of at least 9 amino acids] of said extracellular portion. [, and none of the transmembrane or intracellular portions of said HER2 molecule.]
- 18. (Amended) A process for producing a[n] secreted, extracellular portion of the HER2 molecule essentially free of transmembrane and intracellular portions of the HER2 molecule, said process comprising the steps of:
  - a) ligating the isolated DNA as defined by claim 9 into an expression vector capable of expressing said isolated DNA in a suitable host;
    - b) transforming said host with said expression vector;
  - c) culturing said host under conditions suitable for expression of said isolated DNA, [and] production of said extracellular portion, and secretion of said extracellular portion; and
    - d) isolating said secreted extracellular portion from said host.

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22. (Amended) A vaccine comprising the isolated polypeptide [extracellular portion of the HER2 molecule] as defined by claim 26. [1.]

Please cancel claims 1, 4, 6, and 8.

Please add the following new claims: